



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁷ : A61K 38/16, 47/02, 47/12</p>	<p>A3</p>	<p>(11) International Publication Number: WO 00/15245 (43) International Publication Date: 23 March 2000 (23.03.00)</p>
<p>(21) International Application Number: PCT/US99/20912 (22) International Filing Date: 9 September 1999 (09.09.99) (30) Priority Data: 60/099,870 11 September 1998 (11.09.98) US (71) Applicant (for all designated States except US): ELAN PHARMACEUTICALS, INC. [US/US]; 800 Gateway Boulevard, South San Francisco, CA 94080 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): MOYER, Elizabeth [US/US]; 435 Marin Avenue, Mill Valley, CA 94941 (US). HIRTZER, Pamela [US/US]; 291 Scenic Avenue, Piedmont, CA 94611 (US). (74) Agent: STRATFORD, Carol, A.; Elan Pharmaceuticals, Inc., 800 Gateway Boulevard, South San Francisco, CA 94080 (US).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 8 June 2000 (08.06.00)</p>
<p>(54) Title: STABLE LIQUID FORMULATIONS OF BOTULINUM TOXIN (57) Abstract The invention includes liquid formulations of botulinum toxin that are stable to storage in liquid form at standard refrigerator temperatures for at least 1-2 years and to storage at higher temperatures for at least 6 months. The invention also includes methods of treatment using such formulations and uses of such formulations in the manufacture of medicaments for various therapeutic and cosmetic treatments.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 99/20912

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K38/16 A61K47/02 A61K47/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 97 35604 A (WISCONSIN ALUMNI RESEARCH FOUNDATION) 2 October 1997 (1997-10-02) claims	1-50
A	WO 94 00481 A (ASSOCIATED SYNAPSE BIOLOGICS) 6 January 1994 (1994-01-06) claims	1-50
A	EP 0 593 176 A (WISCONSIN ALUMNI RESEARCH FOUNDATION) 20 April 1994 (1994-04-20) claims	1-50
A	WO 96 11699 A (WISCONSIN ALUMNI RESEARCH FOUNDATION) 25 April 1996 (1996-04-25) claims	1-50

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

29 March 2000

05/04/2000

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 99/ 20912

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Remark: Although claims 29-39 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/US 99/20912
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9735604 A	02-10-1997	US 5756468 A	26-05-1998
		AU 7159496 A	17-10-1997
		EP 0889730 A	13-01-1999
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